## Chapter 5

## SAFETY

- **5.1.1 General.** Custodial services operations expose personnel and material to potentially hazardous conditions. In order to insure safe operating conditions, the principles of accident prevention must become an integral part of all custodial operations. Supervisors are responsible for insuring that respective military agencies safety regulations and manuals are followed. Unsafe practices and/ or conditions will be immediately called to the attention of the supervisor for remedial or corrective action. Conditions beyond the supervisor's responsibility will be referred by him to the higher authority for corrective action. Custodial personnel must be thoroughly indoctrinated on safe operating procedures and precautions essential to the safe and efficient accomplishment of their tasks.
- 5.2.1 Use of Materials. With the rapid development of concentrated cleaning materials, and improvement of equipment for effective accomplishment of custodial services, it is essential that the custodial worker be trained to identify the various types of materials and equipment and to know their limits and restrictions of application. Some concentrated cleaning materials produce a detergent up to fifty times the volume of the concentrate. They are shipped in plastic containers 1" x 1" x 5". Some cleaning materials while applicable to the same cleaning activity, contain different chemical properties, which if mixed would produce dangerous toxic gases. The instructions on the containers should be followed closely, particularly with respect to use in well ventilated areas. Stock-listed items specifically designed for military custodial services should be used unless approval ha been given by the installation for use of other than stocklisted cleaning agents.

Most cleaning materials contain agents which will cause skin irritation when permitted to remain in contact with the skin for prolonged period of time. Rubber gloves are recommended as a means of protecting the hands.

Situations which could or do effect the workers' health should be immediately reported to the installation Medical Service for evaluation.

- **5.2.2 Floor Waxes.** Floor waxes may fall within the following categories:
- 5.2.2.1. Liquid Emulsion Wax. A dispersion of natural and synthetic waxes with small amounts of resins, leveling agents, and other substances in water.
- 5.2.2.2. Water Emulsion Finish. Water emulsion finish is slip resistant and is intended for use on asphalt tile, rubber tile, vinyl tile, linoleum and other floor surfaces. It should not be used on wooden floors unless properly sealed.
- 5.2.2.3 Solvent Wax. Is a dispersion of natural and synthetic waxes or resins in napthas, turpentines, or other solvents, and is not recommended for resilient such as rubber or asphalt. This wax is flammable.
- 5.2.2.4 Paste Wax, Similar to liquid solvent wax but containing a greater proportion of solids. This wax is flammable the same as the liquid solvent wax.
- 5.2.2.5 Care must be exercised in the use of solvent type waxes, since they emit gases due to the vehicle used for the wax. The buffer used with a steel wool pad, if contact is made with metal while buffing the floor could create a friction spark and cause a flash ignition of the gases.



Figure 26. Safety Mobile Adjustable Type Ladder.

- **5.3.1 Use of Equipment.** While safety measures have been discussed throughout the manual, the following items should be given special attention.
- 5.3.1.1 Ladders and Safety Belts. Step ladder treads should be level with ground when ladder is open. An automatic spreader or locking device should be provided to lock step ladders in open position. Metal ladders should not be used for work near electrical conductors or devices. Where hooks are installed, it is recommended that safety belts be used when washing window exteriors above the first floor. Ladders in continuous service should be inspected daily. Ladders found to be defective should be taken out of service for repair or salvage, fig. 26.
- 5.3.1.2 Containers. All containers used for storage purposes must have tightly closing lids. Under no circumstances will flammable materials be stored in open containers. Contents should be clearly indicated on exterior

- of cans. Closets and supply cabinets should be inspected regularly to prevent accumulation of waste materials and unsafe storage of supplies.
- 5.3.1.3 Electrical Equipment. Equipment should be maintained in such a manner as to insure safety of personnel and to reduce fire hazards to a minimum. All electrical equipment, metal frames, and other parts associated with electrical equipment should be connected to a low resistance ground. Any electrical equipment found to be defective during daily inspection and use will be withdrawn from service immediately for repair.
- 5.3.1.4 Keeping Equipment Out of Traffic Lanes. Workers are instructed not to place mop pails, mops, brooms, soaps, or other equipment in traffic lanes where personnel might stumble and fall over them.
- 5.4.1 Wet or Waxed Floors. Workers are instructed to warn personnel approaching slippery floors while mopping or waxing is in progress. If it is necessary for workers to leave before floors are dry, signs and barriers should be erected to prevent accidents. To prevent buildup of brittle, slippery wax—keep floors stripped according to schedule. Repair worn floors promptly. Repair or replace loose or curled tiles, cupped wood, holes and cracks. Avoid



Figure 27. Good Safety Practice for Floor Waxing and Stripping Operations.

natural soaps, as the remaining film is slippery. If used, rinse thoroughly when wet. When rinsing, cleaning, waxing, sealing or stripping floors, use "wet floors" or similar caution signs, placed so that they are visible from all approaches. Dry each section carefully before proceeding to the next, fig. 27. Adequate lighting will prevent persons walking into obstructions or tripping over small objects. Mop or vacuum immediately all spilled liquids, or suds. Remove oil drippings or grease spots immediately by vacuum, scraping or mopping, or by using a nonflammable oil absorbent. Never use solvents on composition floors as they will cause softening and damage to the tiles. To lessen slip problems, adhesive carborundum strips may be used on stair treads and ramps. Purchase only those floor finishes, waxes and coatings which have good anti-slip qualities. Never move furniture when the floor is wet.

**5.5.1 Fire Prevention.** Good housekeeping is of utmost importance in preventing fires. Accumulation of rubbish and combustible wastes are frequent sources of fire. Observance of prescribed fire-prevention practices in the vicinity of flammable gases and vapors is absolutely essential in order to avoid accidental ignition or explosion. Using services and operating personnel are also

responsible for elimination of fire hazards.

- 5.5.1.1 Volatile Cleaning Agents. The use of volatile or flammable liquids for cleaning floors is not permitted. Treated sweeping mops and dusters also present a fire hazard, and they should be kept in ventilated metal containers.
- **5.6.1** Chlorine Bleach Should Not be Mixed With Other Materials. The use of rubber gloves to prevent caustic action or irritation of the skin when using oxalic acid and trisodium phosphate is mandatory.
- **Lifting.** When manually lifting loads, 5.7.1 it is important that safe lifting limits be adhered to. Fifty pounds is the maximum recommended safe weight which may be lifted by a male worker performing continuous or repetitive lifting of materials in compact form. Twenty-five pounds is the maximum recommended safe weight for female workers under similar conditions. The proper lifting procedure is for the worker to first make certain his footing is secure, then grasp the load so that it may be held without becoming unbalanced, then to lift from a squatting position with his back straight and his legs exerting the primary lifting force.